



PERGAMON

Applied Radiation and Isotopes 59 (2003) XI–XIII

Applied
Radiation and
Isotopes

www.elsevier.com/locate/apradiso

AUTHOR INDEX VOLUME 58

Aage, H.K. 103
Åberg, M. 517
Aboagye, E.O. 55
Abu-Jarad, F. 27
Adloff, J.C. 169
Ahern, D.G. 477
Ahmad, M. 611
Airey, P. 401
Akashe, B. 269
Al-Jarallah, M.I. 27
Amiot, M.-N. 607
An, J. 315
Andrés, Y. 161
Arano, Y. 9
Araujo, E.B. 667
Archimandritis, S.C. 501
Arnold, M. 41
Arnold, M.L. 603
Aro, A. 41
Aro, A.C.A. 603
Asfahani, J. 643
Aslam, 629
Aslam, H. 321
Avcibasi, U. 299
Azlina, M.J. 413

Babaei, M.H. 361
Baccarelli, A.M. 239
Bailey, J. 193
Barnhart, T.E. 21
Bastian, T. 69
Basu, S. 447
Ben-David, I. 209
Bilgin, B. 155
Billinghurst, M.W. 353
Birattari, C. 431
Blessing, G. 69
Bontchev, G.D. 1
Bosch, P. 509
Bouchier-Hayes, L. 55
Bozhikov, G.A. 1
Brady, F. 55
Brahimi, H. 125
Brandt, R. 169
Broda, R. 585
Buckley, K. 21
Burchert, W. 201
Byun, J.I. 579

Cabaj, A. 651
Caldas, L.V.E. 85, 489, 495, 595, 719

Cantone, M.C. 431
Carrera, L.M. 509
Cecatti, S.G.P. 85
Cetinkaya, B. 299
Chang, Y.S. 551
Chen, C.-Y. 423
Cheng, H.H. 333
Cheng, Y. 291
Chengcai 407
Chettle, D.R. 41, 603
Chiadli, A. 119
Chiuanta, S. 401
Choi, G.S. 579
Choi, H.D. 227
Choi, S.-J. 455
Choi, Y.H. 579
Chu, A.K.M. 333
Chu, T.-C. 89
Chung, J.-K. 551
Chung, K. 579
Coenen, H.H. 69
Collingridge, D.R. 55
Colturato, M.T. 667
Converse, A.K. 21
Costa, A.M. 495
Coursey, B.M. 39
Crowe, R.J. 657
Csikai, J. 691
Cywicka-Jakiel, T. 137

Dabbs, K.A. 21
Dąbrowska, J. 727
da Cruz, M.T.F. 245
Debeauvais, M. 169
de Medeiros, J.A.G. 245
de Sanoit, J. 151
de Vries, E.F.J. 469
Dias, M.S. 235, 239
Diaz, N.C. 707
Dini, S.A. 533
Dixon, M. 193
Djeffal, S. 125
Dmitriev, S.N. 1
Dong, Y. 567
Drozdowicz, K. 131, 727
Duran, E. 401
Derotski, S. 697

Egan, J.A. 675
El-Azoney, K.M. 69
El-Bahi, S.M. 143

Elsinga, P.H. 469
Elyahyaoui, A. 119
Eschweiler, H. 651

Faarinen, M. 517
Fang, P. 183
Farooq, M. 611
Fazal-ur-Rehman 27
Filer, C.N. 477, 675
Filosofov, D.V. 1
Fleming, D.E.B. 41, 603
Fragopoulou, M. 169
Füchtner, F. 575

Gabańska, B. 131
Gan, M. 219, 685
Gandomkar, M. 361
Garnuszek, P. 481
Gehringer, P. 651
Genezini, F.A. 245
Ghannadi-Maragheh, M. 269
Gilboy, W.B. 177
Gillies, J.M. 193
Giokaris, N.D. 501
Giussani, A. 431
Glaser, M. 55
Gokarn, N.A. 441
Gonalves, I.F. 371
Goodman, M.M. 657
Grambow, B. 161
Gregory, P.J. 177
Groppi, F. 431
Gunawan, J. 201
Gunnarsson, M. 517

Häfeli, U.O. 567
Haider, T. 651
Hamlat, M.S. 125
Harada, K. 9
Haratake, M. 9
Hellborg, R. 517
Hoffman, T.J. 543
Hohn, A. 69
Hollins, S. 401
Höllriegel, V. 431
Hong, Y.-D. 455
Hughes, C. 401
Hutchinson, O.C. 55
Hwang, H. 579

Ibrahem, N.M. 385
Ido, T. 557

Igielski, A. 131
 Ismail, B. 413
 Ivanova, P.I. 1
 Iwata, R. 557

Jenneson, P.M. 177
 Jeong, J.M. 551
 Jianmin, W. 407
 Jivan, S. 21

Kadi, H. 125
 Kamińska, A. 481
 Kanu, A.B. 193
 Kashparov, V.A. 95
 Katti, K.V. 543
 Khairuddin, M.K. 413
 Khan, I.H. 611
 Kienzle, G.J. 679
 Kilislioglu, A. 155, 713
 Kim, E.-H. 551
 Kim, I.J. 227
 Kim, K.-H. 455
 Kim, Y.J. 551
 Király, B. 691
 Kluss, T. 401
 Kobal, I. 697
 Koiso, T. 9
 Köksal, F. 63
 Kondrashov, V.S. 51, 603
 Kong, X. 723
 Koona, R.A. 533
 Korsbech, U. 103
 Köseoğlu, E. 63
 Köseoğlu, R. 63
 Koskinas, M.F. 235, 239
 Kothari, K. 463
 Kothari, K.K. 543
 Kovács, Z. 377
 Krivopustov, M. 169
 Krynicka, E. 131, 727
 Kumar, P. 287
 Kurtoğlu, A. 5
 Kwak, S.I. 579
 Kwok, R.C.W. 333, 339

Lahiri, S. 447
 Lakosi, L. 263
 Laseter, A.G. 477
 Lee, C.W. 579
 Lee, d.S. 551
 Lee, M.C. 551
 Lee, Y.J. 551
 Leide-Svegborn, S. 517
 Leprince, B. 151
 Leth, H. 651
 Li, H. 291
 Li, J. 347
 Licińska, I. 481
 Lima, J.F. 489
 Lin, J.-P. 89
 Lin, S.-Y. 89

Lin, Y. 347
 Liu, C.-H. 89
 Liu, K. 291
 Liu, Y. 291
 Łoskiewicz, J. 137
 Loudos, G.K. 501
 Loya, A.D. 509
 Lü, X. 365
 Luca, A. 607
 Luo, L. 219, 685
 Luthra, S.K. 55

Machulla, H.-J. 679
 Maggioni, T. 431
 Magnusson, C.-E. 517
 Maia, A.F. 595
 Maintas, D. 501
 Majewski, S. 501
 Mannan, R.H. 287
 Manolopoulou, M. 169
 Markai, S. 161
 Martin, S.J. 55
 Martinho, E. 371
 Maslehuddin, M. 27
 Maslov, O.D. 1
 Mattsson, S. 517
 McConathy, J. 657
 Mc Ewan, A.J.B. 287
 McNeill, F.E. 41, 321, 603, 629
 Medeiros, I.M.M.A. 245
 Meera, V. 463
 Meigooni, A.S. 533
 Meira, R.A. 489
 Mielcarski, M. 15
 Milanov, M.V. 1
 Miller, B. 401
 Mishani, E. 209
 Mizuno, T. 557
 Montavon, G. 161
 Morel, J. 607
 Morton, E.J. 177
 Moshier, E.L. 41, 603
 Muramoto, E. 667
 Mushtaq, A. 309

Nada, A. 275
 Najafi, R. 361
 Nakayama, H. 9
 Nakayama, M. 9
 Naqvi, A.A. 27
 Nayak, D. 447
 Negarestani, A. 269
 Nickles, R.J. 21
 Nie, H. 41, 603
 Nielsen, A.F. 401
 Nikita, K.S. 501

Ohmomo, Y. 9
 Okada, K. 377
 Oliveira, M.L. 85, 719
 Ono, M. 9

Ortu, G. 209
 Owen, N.K. 543

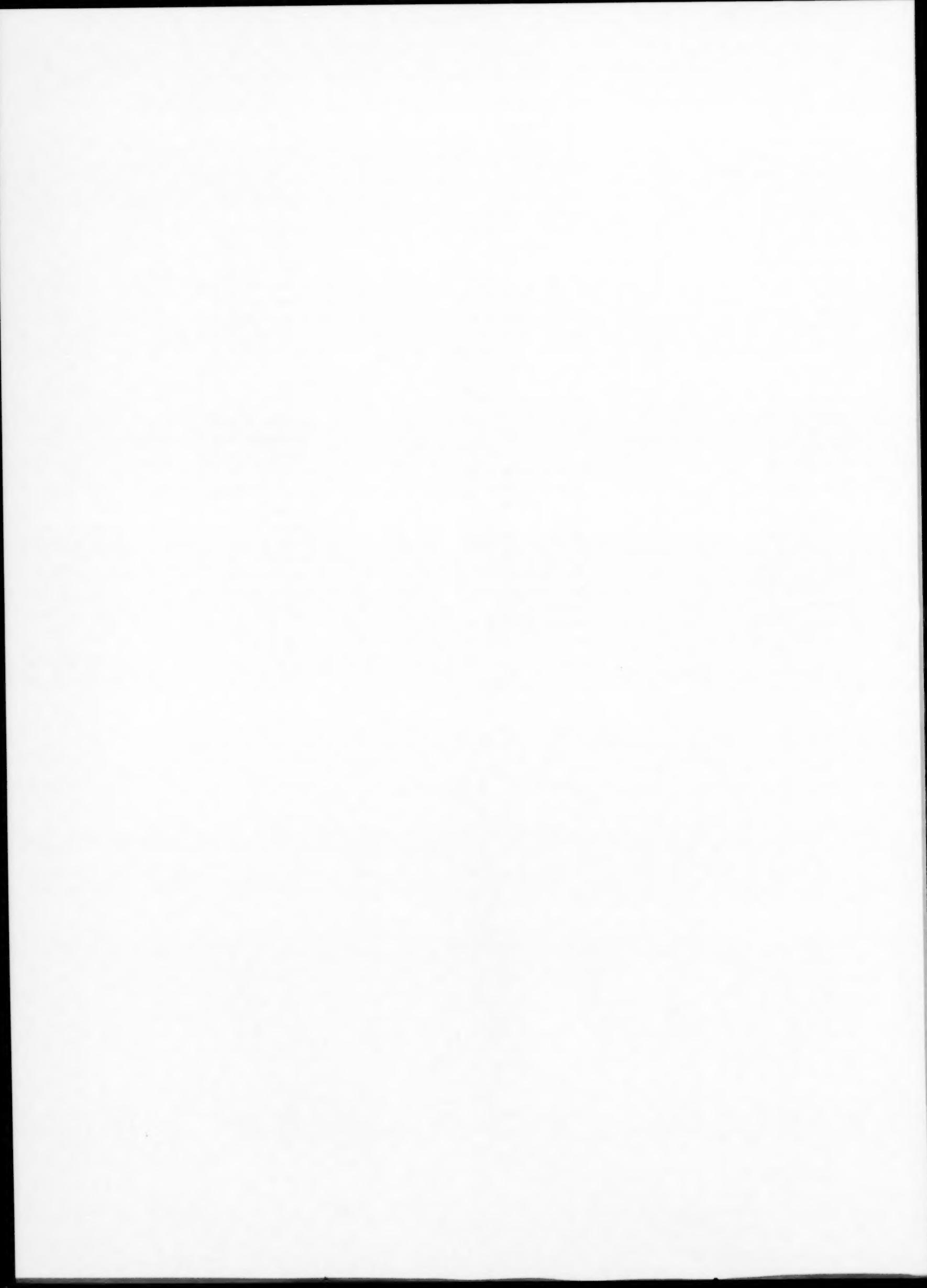
Palacios, O. 509
 Pani, R. 501
 Papanicolas, C.N. 501
 Papastefanou, C. 169
 Park, C.S. 227
 Park, D. 579
 Park, K.B. 455
 Park, S.-H. 455
 Park, W.-W. 455
 Pawlak, D. 481
 Peihua, Z. 407
 Peng, S. 291
 Perry, C. 533
 Pfleger, S. 651
 Pillai, M.R.A. 463
 Pillarsetty, N.K. 543
 Prestwich, W.V. 321, 629
 Pribil, W. 651
 Price, P. 55
 Protsak, V.P. 95
 Pu, Z. 723
 Puchalska, I. 15

Qaim, S.M. 69
 Qingcheng, M. 407

Rabbani, M. 361
 Rafiq, M. 611
 Raghuraman, K. 543
 Rahn, R.O. 79
 Rajurkar, N.S. 441
 Ramaswami, A. 447
 Reischl, G. 679
 Roberts, A.D. 21
 Rocha, F.D.G. 85, 719
 Roth, P. 431
 Rothenberg, S.J. 51, 603
 Roy, K. 447
 Rozen, Y. 209
 Ruth, T.J. 21

Sadat Ebrahimi, S.E. 361
 Sáfar, J. 263
 Sailerova, E. 353
 Sajjad, M.I. 611
 Sakuma, S.H. 413
 Salgado, J. 371
 Sanami, T. 691
 Sánchez, D.P. 707
 Sands, M. 567
 Santos, J.S. 667
 Sarma, H.D. 463
 Sato, J. 393
 Scholten, B. 69
 Scopinaro, F. 501
 Setayeshi, S. 269
 Shabani, G.A. 361
 Shafiee, A. 361

Shin, B.-C. 455
 Shiue, C. 183
 Shiue, G.G. 183
 Silva, C.P.G. 667
 Silver, G.L. 451, 529
 Skog, G. 517
 Sommer, R. 651
 Son, M. 551
 Sosnin, A. 169
 Souza, D.N. 489
 Spellerberg, S. 69
 Sroor, A. 281
 Stefanis, K. 501
 Steinbach, J. 575
 Stenström, K. 517
 Steyn, G.F. 377
 Stoulos, S. 169
 Stronach, I.M. 41, 603
 Styliaris, E. 501
 Sun, H. 291
 Suresh, S. 463
 Suzuki, K. 377
 Szelecsényi, F. 377
 Takahashi, T. 557
 Tam, N.C. 263
 Tang, G. 219, 685
 Tang, X. 219, 685
 Tasneem, M.A. 611
 Thomas, C.L.P. 193
 Todd, A.C. 41, 603
 Todorovski, L. 697
 Tracz, G. 137
 Tschiersch, J. 95
 Tuğrul, A.B. 5
 Tzaphlidou, M. 623
 Ünak, G. 299
 Ünak, T. 115, 299
 Ureña-Núñez, F.U. 509
 Uzunoglu, N.K. 501
 Vaalburg, W. 469
 Valerio, M.E.G. 489
 van der Walt, T.N. 377
 Vargas, M.J. 707
 Varvarigou, A.D. 501
 Vaupotić, J. 697
 Veronese, I. 431
 Volkert, W.A. 543
 Voll, R.J. 657
 Vroegh, J. 469
 Waker, A.J. 629
 Wang, G. 365
 Wang, H. 291
 Wang, L. 315
 Wang, M. 219, 685
 Wang, Y. 347
 Watanabe, K. 557
 Weisenberger, D. 501
 Werner, E. 431
 Westmeier, W. 169
 Wiebe, L.I. 287
 Woźnicka, U. 131
 Wu, H. 315
 Wu, Z. 315
 Xia, H. 287
 Xiang, X. 315
 Yahara, S. 9
 Yang, J. 723
 Yasir, M.S. 413
 Yeung, Z.L.L. 339
 Yıldırım, Y. 299
 Yin, D. 347
 Yoschenko, V.I. 95
 Yu, J. 567
 Yu, K.N. 333, 339
 Yu, W. 657
 Zaichick, V. 623
 Zamani, M. 169
 Zamboni, C.B. 245
 Zarki, R. 119
 Zevallos-Chávez, J.Y. 245
 Zhang, H. 533
 Zhang, X. 347
 Zhang, Z. 287
 Zhou, L. 315
 Zijlstra, S. 201
 Zmazek, B. 697
 Zsigrai, J. 263
 Zu, Y.Y. 193
 Zweit, J. 193



**PERGAMON**Available online at www.sciencedirect.com**SCIENCE @ DIRECT®**

Applied Radiation and Isotopes 59 (2003) XV–XXV

**Applied
Radiation and
Isotopes**www.elsevier.com/locate/apradiso

SUBJECT INDEX VOLUME 58

Absorption cross-section

Effective for neutron transport in rocks 131

Accelerator

Nuclotron at Dubna High Energy Laboratory; use to produce neutron spectra for transmutation of radioactive waste 169

Using a lithium target: evaluation for in vivo NAA 321

*Acetone*Use as eluant to produce high specific volume of ^{99m}Tc and ^{188}Re from a generator 309*[^{11}C]-6-Acrylamido-4-(3,4-dichloro-6-fluoro-anilino)quinazoline (MLO3)*

Synthesis for use as a PET biomarker 209

*[^{11}C] Acryloyl chloride*Synthesis for ^{11}C labelling of N-acrylamides for use as PET markers 209*Activation analysis*

Advantages and limitations of thermal and epithermal NAA of bulk samples 691

Application for assessment of the Dubna experimental transmutation set ups 169

ENAA: optimal conditions for identifying ^{80}Br and ^{128}I in health food *Angelica Keiskei* 423

NAA in vivo: evaluation of Li target performance for production of neutrons 321

NAA: use to determine Ca and P concentration and Ca/P ratio in human trabecular bone 623

Of Egyptian monazite sands 281*

PGNAA set-up: performance tests of external moderators 27

Adaline

Neural network: use to estimate radon concentration in soil 269

Adsorption

Of U(VI) on Amberlite 118 H resin: thermodynamic and kinetic behaviour 155

Of U(VI) on Amberlite 118 H resin: effect of cations and pH 713

Air

Filter: autoradiographic assessment of radionuclides in hot particles 95

Pollutants in Hong Kong: study using energy dispersive X-ray fluorescence 333

Alkylating agent ^{18}F labelled: evaluation as potential synthons for labelling oligonucleotides 469*Alumina*

Thin sintered pellets: use as thermoluminescent dosimeters 719

Aluminium

Foil, target for radioisotope production; water cooled support grid 21

Oxide, sintered pellets: use as thermoluminescent dosimeters 719

Amang

Processing: radiological impact assessment and effect on future land use 413

Amberlite 118 H resin

Thermodynamic and kinetic investigation of U(VI) adsorption behaviour 155

Americium ^{241}Am standardization using a coincidence system 239*Amethyst*

Sintered pellets: use as thermoluminescent dosimeters 85

[2,3- ^3H]- γ -Aminobutyric acid

Synthesis and characterization via 4-aminotetrolic acid 477

*Denotes a Technical Note.

†Denotes a Letter to the Editor.

PII: S0969-8043(03)00227-6

<i>Aniline</i>	
^{131}I labelled: transfer of activity into chicken eggs after oral administration	299
<i>Annexin-V</i>	
^{124}I labelling for use as radiotracer to study apoptosis using PET	55
<i>Anti-1-Amino-3-[^{18}F] fluorocyclobutyl-1-carboxylic acid (FACBC)</i>	
Synthesis	657
<i>4πβ-γ Anticoincidence method</i>	
Use for absolute radioactivity measurements of ^{60}Co , ^{134}Cs and $^{166\text{m}}\text{Ho}$	365
<i>Antimony</i>	
Sulphide: preparation and labelling of nano colloids with two different particle sizes	347
<i>Apoptosis</i>	
Study by PET: preparation of ^{124}I labelled Annexin-V for use as a radiotracer	55
<i>Ash</i>	
Determination in coal stockpiles using a γ - γ probe	643
<i>Astatine</i>	
^{211}At ; radioactive effectiveness and dosimetric data	115*
<i>Autoradiography</i>	
Methods used to assess radionuclides in hot particles on filter samples	95
<i>Azomycin glucuronides</i>	
$^{99\text{m}}\text{Tc}$ labelled: coupling with PnAo for use as a marker for hypoxia Corrigendum (JARI 57, p. 719)	283
<i>Bacteria</i>	
<i>Bacillus subtilis</i> : transfer of Eu(III) associated with polymaleic acid	161
<i>Bacteriophages</i>	
Use as viral indicators for radiation processing of water	651
<i>Barium</i>	
^{133}Ba source: use for gold analysis by the γ -absorption technique	5
<i>Beam</i>	
Electron: use for radiation processing of water with bacteriophages as viral indicators	651
Radiation: performance of a pencil ionisation chamber	595
<i>Benzenes</i>	
Substituted: electrochemical fluorination	679
<i>Bismuth</i>	
$^{204,206}\text{Bi}$: separation from α -irradiated thallium oxide target	447
<i>Blood</i>	
γ -Irradiated: measurement of radiation dose using an iodide/iodate dosimeter	79
<i>Bone</i>	
Human trabecular from femoralneck: Ca and P concentrations and Ca/P ratio by NAA	623
Lead analysis by XRF: correction to calculations	39, 41 [†] , 51 [†]
Lead analysis in bone by XRF: statement	603 [†]
<i>Brachytherapy</i>	
Coating of an angioplasty balloon catheter with ^{166}Ho	455
Source: Brachyseed™ Pd 103, model Pd-1: dosimetric characteristics	533
<i>Breath test</i>	
For fat malabsorption using glycerol tri[1- ^{14}C]oleate: biokinetics and radiation dosimetry	517
<i>Bromine</i>	
^{80}Br : identification in health food <i>Angelica keiskei</i> by NAA	423
<i>α-Bromo-α'-[^{18}F] fluoro-m-xylene</i>	
Use as synthon for labelling oligonucleotides	469
<i>Calcium</i>	
Ca concentration and Ca/P ratio in human trabecular bone by NAA	623
Ca $^{2+}$ ions: effect on transfer of Eu(III) associated with polymaleic acid to <i>Bacillus Subtilis</i>	161
<i>Camera</i>	
3D high resolution γ based on a positron sensitive photomultiplier tube (PSPMT): use for small animals and evaluation of radiopharmaceuticals	501

<i>Cancer</i>	
Liver: treatment and potential of ^{90}Y -oxine-ethiodol	567
Skin: preparation of ^{188}Re labelled paper for treatment	551
<i>Carbonate</i>	
Impure: radiochemical determination of U and Th isotopes	49
<i>Cement</i>	
PGNAA analysis: performance tests of external indicators	27
<i>Ceramic</i>	
Lithium aluminate: proposal as a tritium breeder in a reactor	509
<i>Cesium</i>	
^{134}Cs : absolute radioactivity measurements by $4\pi\beta\gamma$ anticoincidence method	365
^{134}Cs halides (I, Br and Cl): studies on self and electrolytic diffusion	441
^{137}Cs in milk powder: measurement by anticoincidence shielded γ -spectrometer	579
^{137}Cs source for irradiation of blood: dose measurement by an iodide/iodate solution	79
<i>Chelating agent</i>	
$^{99\text{m}}\text{Tc}(\text{I})$ -tricarbonylbenzyl-dihydroxymethylphosphine(NP_2) chelate: synthesis and in vivo and in vitro characterization	543
<i>Chromatography</i>	
Gas, with mass spectrometry to screen $2[^{18}\text{F}]$ FDG for contaminants	193
<i>Coal</i>	
Stockpile: ash determination by a spectrometric $\gamma\gamma$ probe	643
<i>Coastal zone</i>	
Studies: evolving role of radiotracers	401
<i>Cobalt</i>	
^{60}Co	
Absolute calibration using the sum peak method and an HPGe detector	227
Absolute radioactivity measurement by $4\pi\beta\gamma$ anticoincidence method	365
Scanner for container inspection	315
Standardization using a coincidence system plastic scintillation detector	239
<i>Code</i>	
MCNP4C: use for optimisation of neutron and γ -ray transmission set-up for measuring moisture in coke	139
RESRAD: use in radiological impact assessment of amang and ilmenite on future land use	413
<i>Coke</i>	
Humidity measurements: optimisation of fast neutron and γ -ray transmission set-up	137
<i>Colloid</i>	
Nano, of antimony: preparation and radiolabelling	347
<i>Container</i>	
Inspection system using ^{60}Co scanner	315
<i>Corrigendum</i>	
To 'A new design of ^{238}Pu activity sources for use in intercomparison exercises' (JARI 57, 171-176)	151
To ' $[^{99\text{m}}\text{Tc}]$ labelled PnAo azomycin glucuronides....' (JARI 57, 719)	287
<i>Counting</i>	
LSC: review of TDCR method for standardising radionuclides	585
<i>Cyclotron</i>	
Production of ^{124}I and $^{120\text{g}}\text{I}$: dry distillation and optimisation studies	69
<i>Decay</i>	
Of ^{149}Nd : level structure of ^{149}Pm	245
<i>Detector</i>	
CdTe: use in detection of smuggled nuclear material	263
Coaxial p-type,HPGe: efficiency transfer in calibration using Monte Carlo method	707
4π plastic scintillator: development for standardization of radionuclides	239
HPGe: use in the absolute calibration of ^{60}Co by the sum peak method	227
NaI transportable: use in search for lost or orphan radioactive sources	103
<i>Diamond</i>	
Film produced by chemical vapour deposition: use as a Th dosimeter	89

Diffusion	
Coefficient of ^{111}In -DTPA	1
Cooling of thermal neutrons in basic rock minerals by Monte Carlo simulation	727
Self and electrolyte coefficients of Cs halides: determination and disparities between experimental and theoretical values	441
<i>N,N-Dimethyl-2-(2-amino-4-[^{18}F]fluorophenylthio)benzylamine</i>	
Synthesis for use as a serotonin transporter imaging agent	183
Disproportionation	
Of plutonium: ambiguity phenomenon	529*
Of plutonium: relation of work integrals	451*
DNA	
Adduction by nitrobenzene: inhibitory effect of dietary constituents	291
Dose	
Absorbed in lithium aluminate after neutron bombardment	509
Assessment for Egyptian monazite sands	281*
Theoretical and experimental determination of characteristics for a brachyseed™ Pd-103 source	533
Dosimeter	
Evaluation of solid state composites of topaz for measurements in radiotherapy	489
Iodide/iodate solution for assessment of dose to γ -irradiated blood	79
Thermoluminescent	
Properties of sintered amethyst pellets	85
Use of CVD diamond film for radiation detection	89
Use of sintered Al_2O_3 pellets for therapeutic dose range	719
Dosimetry	
CT: performance of a pencil ionisation chamber in various radiation beams	595
Data on radiotoxic effectiveness of ^{211}At	115*
Estimation of O-(2-[^{18}F]fluoroethyl)-L-tyrosine when used as an oncological PET tracer	219
Radiation from glycerol tri[^{14}C] oleate for patients undergoing a fat malabsorption breath test	517
Re-evaluation of biokinetics and compartmental model of Zr in humans	431
Using an iodide/iodate solution: application to γ -irradiation of blood	79
Drug	
γ -Irradiated: electron paramagnetic resonance	63
Dust	
Street: determination of multielement profile by EDXRF	339
Earthquake	
Prediction: application of regression trees to the analysis of soil radon data	697
Editorial note	
Concerning in vivo bone-lead analysis by XRF (JARI 55, 799–803)	39
<i>[5,7-^3H] (\pm)-Efaroxan</i>	
Preparation and tritium labelling	675
Egg	
Chicken: transfer of orally administered ^{131}I	299
Electrodeposition	
Use in analysis of U and Th in impure carbonates	119
Electrophoresis	
Use to study ^{111}In -DTPA	1
Element	
Multi: determination of profile in street dust by EDXRF	339
EPR	
Of γ -irradiated neurological and antihypertensive drugs	63
Europium	
Eu(III) transfer to <i>Bacillus subtilis</i> associated with polymaleic acid	161
Extraction	
Solid phase, micro: use in screening 2-[^{18}F]FDG for contaminants	193

<i>[¹⁸F] FAC BC</i>	
Synthesis	657
<i>Fat</i>	
Malabsorption: biokinetics and radiation dosimetry for patients using glycerol tri-[1- ¹⁴ C] oleate for breath test	517
<i>[¹⁸F] Fluoride</i>	
Use in electrochemical labelling of substituted benzenes	679
<i>Fluorination</i>	
Electrochemical of substituted benzenes	679
¹⁸ F compounds for PET studies: synthesis from bromo compounds and removal of excess bromo compound	557
<i>4-[¹⁸F]-Fluorobenzoyl Annexin V (4-[¹⁸F]FBA)</i>	
Synthesis and evaluation for identification of apoptotic cells	201
<i>N-(4-[¹⁸F] Fluorobenzyl)-2-bromoacetamide</i>	
Use as synthon for labelling oligonucleotides	469
<i>2-[¹⁸F]Fluoro-2-deoxy-D-glucose</i>	
Screening of infusions for contaminants by solid phase micro extraction with gas chromatography-selective ion monitoring mass spectrometry	193
<i>O-(2-[¹⁸F]fluoroethyl)-L-tyrosine</i>	
Synthesis, pharmakinetics and radiation dose estimation when used as a PET tracer	219
<i>O-(3-[¹⁸F] Fluoropropyl)-L-tyrosine</i>	
Synthesis by exchange on a quaternary-4-aminopyridinium resin	685*
<i>Foils</i>	
In an epithermal neutron field: curve for determination of resonance self shielding factor	371
<i>Food</i>	
Health, <i>Angelica keiskei</i> : identification of ⁸⁰ Br and ¹²⁸ I by ENAA	423
Inhibitory effect of dietary constituents on nitrobenzene DNA and hemoglobin adductions	291
<i>Gallium</i>	
⁶⁸ Ga: preparation from a ⁶⁸ Ge/ ⁶⁸ Ga generator system	9
Isotopes: cross section measurements for (n, 2n), (n, p) and (n, n α) reactions	723*
<i>Gamma absorption technique</i>	
Use for gold analysis	5
<i>Gas</i>	
Algerian industry: radon concentration in natural and liquid	125
<i>Generator</i>	
⁶⁸ Ge/ ⁶⁸ Ga system: use of a polymer containing N-methylglucamine groups to adsorb ⁶⁸ Ge	9
^{99m} Tc/ ¹⁸⁸ Re: elution of column with acetone to produce high specific volume solutions of isotopes	309
⁶² Zn/ ⁶⁰ Cu: investigation of the ⁿ Zn(p,x) ⁶² Zn nuclear process up to 70 MeV	377
<i>Germanium</i>	
⁶⁸ Ge/ ⁶⁸ Ga generator system: use of polymer containing N-methylglucamine groups to adsorb ⁶⁸ Ge	9
<i>Glycerol tri[1-¹⁴C] oleate</i>	
Biokinetic and radiation dosimetry for patients undergoing a fat malabsorption breath test	517
<i>Gold</i>	
Analysis by the γ -absorption technique	5
<i>Grid</i>	
Development of water-cooled grid support for accelerator production of positron emitters	21
<i>Half life</i>	
Of ⁶⁵ Zn: determination	607*
<i>Hemoglobin</i>	
Adduction by nitrobenzene: inhibition by dietary constituents	291
<i>Holmium</i>	
^{166m} Ho: absolute radioactivity measurement by 4 π β - γ anticoincidence method	365
¹⁶⁶ Ho-coated balloon for vascular brachytherapy	455

<i>Hydroxyapatite</i>	
^{188}Re labelled particles: preparation for radiation synovectomy	463
<i>Hypoxia</i>	
Tissue: use of $[^{99\text{m}}\text{Tc}]$ labelled PnAo azomycin glucuronides as imaging agents	
Corrigendum (JARI 57, 719)	287
<i>Ilmenite</i>	
Processing: radiological impact assessment and effect on future land use	413
<i>Imaging</i>	
Marker for tissue hypoxia: use of $^{99\text{m}}\text{Tc}$ labelled PnAo glucuronides Corrigendum (JARI 57, 719)	287
Serotonin transporter agent: synthesis of N,N-dimethyl-2-(2-amino-4-[^{18}F]fluorophenylthio)benzylamine	183
Small animals: use of a 3D high resolution γ -camera	501
<i>Imidazoline II receptor antagonist</i>	
Tritium labelling	675
<i>Indium</i>	
^{111}In -DTPA complex: study by electromigration, stability constant and diffusion coefficient	1
<i>Iodide/iodate</i>	
Dosimeter: application to γ -irradiation of blood	79
<i>Iodine</i>	
^{124}I and $^{120\text{g}}\text{I}$ cyclotron production: optimisation studies	69
^{124}I labelling of Annexin-V for use as a radiotracer for PET study of ooptosis	55
^{125}I , seedless ophthalmic applicator: preparation	15
^{128}I : identification in health food <i>Angelica keiskei</i> by ENAA	423
^{131}I orally administered: transfer into chicken eggs	299
<i>Ion chamber</i>	
Electret: use to determine Rn concentration in Algerian gas and oil	125
<i>Ion exchange</i>	
Adsorption behaviour of U(VI) on Amberlite 118 H	155,713
Synthesis of o-(3-[^{18}F]fluoropropyl)-L-tyrosine by direct exchange on a quaternary 4-aminopyridinium resin	685*
<i>Ionization chamber</i>	
Pencil: performance in various radiation beams	595
Tandem system: response characteristics in standard X-ray beams	495
<i>Kit</i>	
Freeze dried, for EDTMP-based bone seeking radiopharmaceuticals	481
<i>Lead</i>	
In bone, XRF analysis: corrections to calculations	39, 41 [†] , 51 [†]
In bone XRF: statement concerning uncertainties	603 [†]
^{210}Pb and ^{212}Pb : atmospheric concentrations after a volcanic eruption	393
<i>Lipiodol (or Ethiodol)</i>	
Preparation on ^{90}Y -oxine ethiodol for liver cancer treatment	567
<i>Lithium</i>	
Aluminate: determination of neutron absorbed doses	509
<i>Liver</i>	
Cancer: preparation of ^{90}Y -oxine ethiodol for treatment	567
<i>Lucas cells</i>	
Use to determine Rn concentration in Algerian oil and gas	125
<i>Lutetium</i>	
^{177}Lu -EDTMP freeze dried kit: evaluation	481
<i>Mass attenuation coefficients</i>	
Of gold alloys: measurement by γ -absorption technique	5

<i>3-o-methyl-6-[¹⁸F]fluoroDOPA</i>	
Synthesis	575*
<i>N-Methylglucamine group</i>	
Use as an adsorbent for ⁶⁸ Ge in a ⁶⁸ Ge/ ⁶⁸ Ga generator	9
<i>Moderator</i>	
External: performance tests for a PGNAA set-up	27
<i>Moisture</i>	
Measurement in coke: optimisation of fast neutron and γ -ray transmission	137
<i>Monazite</i>	
Egyptian: neutron activation analysis and dose assessment	281*
<i>Monte Carlo</i>	
Simulation applied to the efficiency transfer in the calibration of a coaxial p-type HPGe detector	707
Simulation of pulsed neutron experiments: diffusion cooling in basic rock minerals	727
<i>Neodymium</i>	
¹⁴⁹ Nd decay: excited levels in ¹⁴⁹ Pm	245
<i>Neutron</i>	
Absorbed dose and damage determination in lithium aluminate	509
Effective absorption cross section in rock samples	131
Epithermal: universal curve for resonance self shielding factor	371
Low energy source development for use in radiobiological and radiochemical research	629
Pulsed: Monte Carlo simulation of experiments and diffusion cooling in basic rock minerals	727
Spectra production at Dubna for transmutation of radioactive wastes	169
<i>Nitrobenzene</i>	
¹⁴ C labelled,-DNA and hemoglobin adducts: inhibition by dietary constituents	291
<i>Noise adjusted singular value decomposition (NASVD)</i>	
Use in source detection	103
<i>Nuclear material</i>	
Smuggling in the presence of legitimate radioisotopes: use of CdTe based γ -ray spectrometry	263
<i>Octreotide</i>	
Labelling with ^{99m} Tc: effect of concentration of reducing agents and amount of Na pertechnetate	361
<i>Oil</i>	
Algerian: ²²² Rn concentrations	125
Enhanced recovery by water flooding using environmental isotopes as tracers	611
Field injection profile: study of oxygen activation well logging technique	407
<i>Oligonucleotides</i>	
Evaluation of [¹⁸ F]-labeled alkylating agents as potential synthons for labelling	469
<i>Ophthalmic applicator</i>	
Using ¹²⁵ I: preparation in seedless form	15
<i>Oxine-ethiodol</i>	
⁹⁰ Y labelled: preparation and evaluation for treatment of liver cancer	567
<i>Oxygen</i>	
Activation well logging technique: study and its application to oil fields	407
<i>Pain</i>	
Palliation: evaluation of freeze dried kit for preparation of EDTMP based bone seeking radiopharmaceuticals	481
<i>Palladium</i>	
¹⁰³ Pd: brachyseed(Pd-103) source: dosimetric characteristics	533
¹⁰³ Pd production by the ¹⁰³ Rh(p,n) ¹⁰³ Pd reaction	821
<i>Paper</i>	
¹⁸⁸ Re labelled: preparation for treating skin cancer	551
<i>Particle</i>	
Hot, deposited on air filters: assessment of radionuclides by autoradiography	95

<i>Pellet</i>	
Thin sintered Al ₂ O ₃ : use as thermoluminescent dosimeters	719
<i>PET</i>	
Studies: improved synthesis of ¹⁸ F fluoro compounds from bromo compounds	557
Study of apoptosis: preparation of ¹²⁴ I labelled annexin-V	55
Thin window support system for accelerator production of positron emitters (¹⁷ F, ¹⁸ F, ¹¹ C, ¹⁵ O)	21
<i>Phosphorus</i>	
Concentration and Ca/P ratio in human trabecular bone by NAA	623
<i>Photon</i>	
Emission probabilities of ⁶⁵ Zn	607*
<i>Plant</i>	
Development after germination: study by X-ray micro tomography	177
<i>Plutonium</i>	
Disproportionation: ambiguity	529*
Disproportionation: the relation to work integrals	451*
²³⁸ Pu source for intercomparison studies: corrigendum to paper (JARI 57, 171–176)	151
<i>Polymaleic acid</i>	
Effect on transfer of Eu to <i>Bacillus subtilis</i>	161
<i>Polymer</i>	
Styrene-divinylbenzene containing N-methylglucamiune groups: use in a ⁶⁸ Ge/ ⁶⁸ Ga generator	9
<i>Probe</i>	
γ - γ spectrometric: optimisation for ash determination in coal	643
<i>Promethium</i>	
¹⁴⁹ Pm: study of excited levels from decay of ¹⁴⁹ Nd	245
<i>Protein</i>	
Radio-iodination via N-succinimidyl-4-[¹³¹ I] iodobezoate	667
<i>Radioactivity</i>	
Absolute measurements for ⁶⁰ Co, ¹³⁴ Cs and ^{166m} Ho by 4 π β - γ anticoincidence method	365
In different rock types in Wadi Wizir, E desert of Egypt: disequilibrium	385
Levels in salt from natural sediments in NW deserts and markets in Egypt	143*
<i>Radiography</i>	
Auto: measurements on air filters and assessment of radionuclides in hot particles	95
Digital: of containers and trains	315
<i>Radioisotope</i>	
Environmental: use in interwell tracing at Fimkassar oilfield, Pakistan	611
Production: water cooled grid support for high power irradiation with thin target windows	21
<i>Radionuclide</i>	
Autoradiographical methods of assessment in hot particles on an air filter	95
Low-level: use of anticoincidence shielded γ -ray spectrometer	579
Natural: evaluation at Um-Grafat area in Egypt	275*
Standardization: review of TDCR methods	585
<i>Radiopharmaceutical</i>	
EDTMP based bone seeking: evaluation of freeze dried kit	481
Studies with small animals: use of a 3D high resolution γ -camera	501
Synthesis of anti-[¹⁸ F]FACBC	657
<i>Radiotherapy</i>	
X-ray beam quality control by a tandem ionisation chamber system	495
<i>Radiotracer</i>	
¹²⁴ I labelled Annexin-V for study of apoptosis by PET	55
Role in coastal zone studies	401
<i>Radium</i>	
²²² Ra presence in magma emitted by a volcanic eruption	393
<i>Radon</i>	
In soil: determination by Adaline neural network	269

In soil analysis for earthquake prediction: application of decision trees	697
²²² Rn concentrations in Algerian oil and gas	125
²²² Rn release from erupting magma and atmospheric concentration	393
<i>Reactor</i>	
Triga Mark III: use of lithium aluminate in reactor to produce tritium	509
<i>Rhenium</i>	
¹⁸⁸ Re labelled paper for treating skin cancer: preparation	551
¹⁸⁸ Re perrhenate solutions: storage conditions and impact on their use for labelling	353
¹⁸⁸ Re preparation of high specific volume solutions from a generator	309
¹⁸⁸ Re; use to label hydroxyapatite particles for radiation synovectomy	463
<i>Rock</i>	
Heterogeneous or homogeneous for neutron investigations	131
In the Wadi Wizr region of Egypt: radioactive disequilibrium	385
Minerals: diffusion cooling of thermal neutrons by Monte Carlo simulation	727
<i>Salt</i>	
Radioactivity levels in sediment samples from the W desert in Egypt	143*
<i>Samarium</i>	
¹⁵³ Sm-EDTMP freeze dried kit: evaluation	481
<i>Sample</i>	
Bulk: advantages and limitations of thermal and epithermal NAA	691
<i>Scanner</i>	
Using ⁶⁰ Co for container inspection	315
<i>Sample</i>	
Bulk: advantages and limitations of thermal and epithermal NAA	691
<i>Scanner</i>	
Using ⁶⁰ Co for container inspection	315
<i>Sediment</i>	
Salt from W. desert and markets in Egypt: radioactivity levels	143*
<i>Skin</i>	
Cancer: preparation of ¹⁸⁸ Re labelled paper for treatment	551
<i>Soil</i>	
Radon concentration: determination by Adaline neural network	269
Radon concentration for earthquake prediction: application of regression trees	697
<i>Solvent extraction</i>	
Use in analysis of U and Th in impure carbonates	119
<i>Source</i>	
Low energy monoenergetic neutron: development for use in radiobiological and radiochemical research	629
Lost or orphan radioactive: search and recovery based on NaI detectors and γ -spectrometry	103
²³⁸ Pu for intercomparison study: corrigendum to paper (JARI 57, 171–176)	151
<i>Spectra</i>	
Gamma: use in searching for lost or orphan radioactive sources	103
Of γ -irradiated drugs investigated by EPR	63
<i>Spectrometer</i>	
Anti-coincidence shielded γ -ray: development for analysis of low level environmental radionuclides	579
<i>Spectrometry</i>	
Accelerator mass: use to study inhibition of nitrobenzene induced DNA and hemoglobin adductions by dietary constituents	291
α -: use in analysis of U and Th in impure carbonates	119
γ -Ray using a CdTe detector: use for revealing smuggled nuclear material	263
Low activity γ - γ probes for ash determination in coal	643
Radioactivity levels in sediment samples from the W desert in Egypt	143*
<i>Sphere</i>	
In an epithermal neutron field: curve for determination of resonance self shielding factor	371

<i>Stability constant</i>	
Of ^{111}In -DTPA: determination by electrophoresis	1
<i>Stripping factors</i>	
Of spectra: use in source detection	103
<i>Strontrium</i>	
^{90}Y : detection by autoradiography on air filters	95
<i>N-Succinimidyl-4-[^{131}I] iodobenzoate</i>	
Optimization of synthesis for radio-iodination of proteins	667
<i>Sum peak method</i>	
Use for absolute calibration of ^{60}Co	227
<i>Synovectomy</i>	
Preparation and studies of ^{188}Re labelled hydroxyapatite	463
<i>Synthon</i>	
α -Bromo- α' -[^{18}F]fluoro- <i>m</i> -xylene and <i>N</i> -(4-[^{18}F] fluorobenzyl)-2-bromoacetamide: use for labelling antisense oligonucleotides	469
<i>Target</i>	
α -irradiated thallium oxide: separation of carrier free $^{204,206}\text{Bi}$	447
Aluminium foil: water cooled grid support	21
Lithium for production of neutrons: evaluation of performance in a low energy accelerator	321
TeO_2 : technology in cyclotron production of ^{124}I and $^{120\text{g}}\text{I}$	69
<i>Technetium</i>	
Sodium $^{99\text{m}}\text{Tc}$ pertechnetate: effect of amount on direct labelling of octreotide	361
$^{99\text{m}}\text{Tc}$: preparation of high specific volume solutions from a generator	309
$^{99\text{m}}\text{Tc}$ -EDTMP freeze dried kit: evaluation	481
$^{99\text{m}}\text{Tc}$ -(I)-tricarbonyl-benzylamino-dihydroxy methyl phosphine (NP_2) chelate: synthesis and in vitro and in vivo characterization	543
<i>Thallium</i>	
Oxide target, α -irradiated: separation of carrier free $^{204,206}\text{Bi}$	447
^{204}Tl solution: standardization	235
<i>Thermoluminescence</i>	
Properties of CVD diamond film	89
Properties of sintered amethyst	85
<i>Thorium</i>	
Radiochemical analysis in impure carbonates(travertine)	119
<i>Tomography</i>	
Computed: evaluation of a pencil ionisation chamber in various beams	595
X-ray micro system: optimisation for low dose study of living organisms	177
<i>Topaz</i>	
Powdered and embedded in Teflon or glass: evaluation of the thermoluminescent properties for use as a dosimeter	489
<i>O-Tosyl compounds</i>	
Use in the preparation of bromine free ^{18}F fluoro compounds for PET studies	557
<i>Travertine</i>	
Determination of U and Th content by solvent extraction, electrodeposition and α -spectrometry	119
<i>Triple to double coincidence ratio method</i>	
Standardization of radionuclides: review	585
<i>Tritium</i>	
Labelling and characterisation of imidazolineII receptor antagonist [5,7- ^3H](\pm)-efaroxan	675
Labelling of γ -aminobutyric acid via 4-amino tetrolic acid	477
Production by neutron bombardment of lithium aluminate	509
<i>Uncertainty propagation</i>	
In XRF in vivo bone-lead analysis: corrections to calculations	39,41 [†] ,51 [†]
<i>Uranium</i>	
Adsorption on Amberlite 118 H resin: thermodynamic and kinetic investigation	155

Depleted: transmutation rates	169
Radiochemical analysis in impure carbonate(travertine)	119
U(VI): effect of various cations and pH on adsorption on Amberlite IR-118 H resin	713
<i>Volcano</i>	
Eruption: concentrations of natural radionuclides emitted	393
<i>Waste</i>	
Radioactive: transmutation by neutron fluxes	169
<i>Water</i>	
Flooding and interwell tracing using isotopes a tracers in Fimkassar oil field, Pakistan	611
Radiation processing: use of bacteriophages as viral indicators	651
<i>Well logging</i>	
Oxygen activation-logging tool: development for use in oil fields	407
Stock pile probe: optimisations for determination of ash in coal	643
<i>Wire</i>	
Monte Carlo calculation of epithermal neutron resonance self shielding factors	371
<i>X-ray</i>	
Beams: quality control in radiotherapy by a tandem ionisation chamber system	495
EDXRF: use to determine multi element profiles in street dust	339
EDXRF: use to study air pollutants in Hong Kong	333
Microtomography system: optimisation for low dose study of living organisms	177
Statement about calculating lead in bone and uncertainty in XRF in vivo analysis	603 [†]
XRF analysis of lead in bone: corrections to calculations	39,41 [†] ,51 [†]
<i>Zinc</i>	
Investigation of the ^{nat} Zn(p,x) ⁶² Zn nuclear process up to 70 MeV	377
⁶⁵ Zn: determination of half life and photon emission probabilities	607*
<i>Zirconium</i>	
⁹⁰ Zr and ⁹⁶ Zr: re-evaluation of biokinetics in humans	431